



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/731,233

12/09/2003

Arnold H. Bramnick

BOC9-2003-0041 (411)

4914

7590  
Gregory A. Nelson  
Akerman Senterfitt  
Fourth Floor  
P.O. Box 3188  
West Palm Beach, FL 33402-3188

10/20/2008

EXAMINER

FLYNN, KEVIN H

ART UNIT

PAPER NUMBER

3628

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,233	<b>Applicant(s)</b> BRAMNICK ET AL.	
	<b>Examiner</b> KEVIN FLYNN	<b>Art Unit</b> 3628	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### Status of Claims

1. This action is in reply to the response filed on 22 September 2008.
2. Claim 1 as been amended.
3. Claims 12-13, 19-20 have been canceled.
4. Claims 1 and 7-8 are currently pending and have been examined.

### *Continued Examination Under 37 CFR 1.114*

5. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 22 September 2008 has been entered.

### *Response to Arguments*

6. Applicant's arguments filed on 12 May 2008 have been fully considered but they are not persuasive.
7. Specifically, Applicant argues the references do disclose the "*remaining unflown ticket value*". Applicant argues that Slivka teaches only the "actual fare amount" previously paid for the disrupted flight, and does not teach "*remaining unflown ticket value*" because the limitation "refers to the ticket value for the remaining unflown flight". The Examiner respectfully disagrees. Slivka, in ¶ 0037, discloses both the "actual fare amount", or barring that, calculating the "amount of a given **segment** of an itinerary" of the disrupted passenger. The limitation, "remaining unflown

ticket value", read in its broadest reasonable interpretation, encompasses the value of "a given segment of an itinerary".

8. Applicant also argues the references do not disclose "a rebooking cost". This argument is moot in view of the new grounds of rejection over Orenstein (Orenstein, David; Computerworld v32n39, pp: 24; Sep. 28, 1998) in view of Pucci (Pucci, Carol; Bumping happens, so make it work for you: Be justly compensated; National Post; July 7, 2001)
9. Applicant further argues the references do not disclose "a passenger lifetime value". Applicant argues "'a passenger lifetime value' in the sense of the present invention is a much more complex concept and takes into consideration of other factors besides the frequent flier information and the average cost of the passenger's travel history". Examiner respectfully disagrees. Slivka, in ¶ 0014 discloses a "determined business value of the passenger"; ¶ 0015 "an overall value of the passenger's aggregate business"; and ¶ 0035 discloses a passenger history including "a number of flights a passenger has purchased on a particular carrier over a period of time (i.e. frequent flier information)" and "the average cost of the passenger's travel history". Applicant's arguments that the "passenger lifetime value" is more complex is not persuasive, because the claim, read in its broadest reasonable interpretation, encompasses frequent flier and average cost, as disclosed in the Slivka reference. Moreover, although the specification is not to be read into the claims, the only examples of a "passenger lifetime value", in ¶ 0017 and ¶ 0021 disclose the history of ticket purchases and frequent flier information, so Examiner does not agree the claims, as written, are more complex than the disclosure in Slivka.
10. Regarding "customer relationship management data", Slivka, ¶ 0035, discloses a "passenger history, behavior, and profile databases", and ¶ 0039 discloses calculating a passenger value, which is disclosed as the only action performed by the CRM in the specification (¶ 0020 "the passenger value (PAX) as determined by the CRM system"). It should be noted that there is no accepted definition of CRM, but the Slivka reference discloses the aims and applications of a CRM, namely improved customer satisfaction and storing various customer habits with the system. In addition, although Slivka does not specifically disclose the words "customer

relationship management data", Campbell, in at least ¶ 0046 and ¶ 0050, does. Moreover, Campbell discloses much of the same information in its CRM module as Slivka, including profile information, frequent travel information, destination information. Moreover, Slivka, in ¶ 0035 discloses that "One skilled in the art would realize that other types of passenger information may be maintained in these and other databases", which would include a CRM database as disclosed in Campbell. Finally, the Applicant suggests that the CRM system of Campbell would not be appropriate for flight re-accommodation because of the vast amount of information in the Campbell database, but no such slowness of the Campbell system has been shown, nor do the instant claims reflect the importance of processing speed. Moreover, the Slivka reference discloses large amounts of customer data including a profile history as well as "ancillary services . . . such as hotel and car reservations" (Slivka ¶ 0006), but yet it is used for exactly the same purpose (i.e. rebooking) as the instant application.

11. In addition, see the updated rejections below.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

13. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "wherein the processing is to be completed in a timely fashion in order to avoid additional costs including meal and accommodation cost" is not supported within the specification. ¶ 0015 includes taking into account the value of meals and hotel charges for a

rebooking calculation, but does not disclose the timeliness of the calculation in order to avoid these costs.

14. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

16. Claim 1 is rejected as indefinite. The limitation(s) "wherein the processing is to be completed in a timely fashion" is indefinite because it is unclear what constitutes "timely", and the specification is silent on the matter. For the purpose of this examination, "timely" shall be interpreted as any processing time necessary.

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Examiner's Note:** The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

19. Claims 1, 7-8, 12-13, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slivka et al. (U.S. Pub. 2003/0225600 A1) in view of Campbell et al. (U.S. Pub. 2003/0144867 A1) in view of Orenstein (Orenstein, David; Computerworld v32n39, pp: 24; Sep. 28, 1998) in view of Pucci (Pucci, Carol; Bumping happens, so make it work for you: Be justly compensated; National Post; July 7, 2001).

**Claim 1, 12, 13:**

Slivka, as shown, discloses the following limitation(s):

- *identifying passengers who must be re-accommodated* (see at least Slivka ¶ 0014);
- *for each identified passenger, obtaining passenger data including*
  - *a frequent flyer status* (see at least Slivka ¶ 0024, ¶ 0035),
  - *a remaining unflown ticket value* (see at least Slivka ¶¶ 0037-0038 disclosing calculating and using an unflown ticket value),
  - *a passenger lifetime value* (see at least Slivka ¶ 0014 “determined business value”; ¶ 0015 “passenger’s aggregate business”; ¶ 0035 showing a total number of flights history and an average cost of that history), and
  - *flight operations data including flight schedule and seat availability on the airline and competitor airlines* (see at least Slivka ¶ 0032; ¶ 0036);

- *processing the passenger data and the flight operations data based on a set of rules including at least one among a rule for arranging said identified passengers according to a descending revenue impact to the airline, a rule for arranging said identified passengers according to passenger frequent flyer status, and a rule for arranging said identified passengers according to a lifetime value of each passenger, [wherein the processing is to be completed in a timely fashion to avoid additional costs including meal and hotel accommodation cost] (see at least Slivka ¶ 0039);*
- *displaying re-accommodation candidates as a result of the processing (see at least Slivka ¶ 0028, “monitor 115”; Slivka teaches monitor 115 can provide information to one or more external entities including a travel provider or travel agent service, but does not explicitly teach displaying the re-accommodation candidates. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Slivka to have included displaying the re-accommodation candidates for the advantage of allowing a travel provider or agent to visually track and confirm all of the passengers that need to be re-accommodated); and*
- *selecting passengers for re-accommodation from the re-accommodation candidates (see at least Fig. 2: “235”; Fig. 3; Slivka ¶ 0044-0045).*

Regarding the limitation:

- *customer relationship management data.*

Slivka, in at least ¶ 0035 discloses a “passenger history, behavior, and profile databases” but does not specifically disclose “customer relationship management”. However, Campbell, in at least ¶ 0046 and ¶ 0050, discloses customer relationship management.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method and machine-readable storage of Slivka to have included customer relationship management data as disclosed by Campbell for the advantage of analyzing and predicting future travel spending (Campbell ¶ 0050).

Regarding the limitation:



- *a rebooking cost.*

Slivka, ¶ 0015, discloses reducing costs based on rebooking, but does not specifically identify that cost. However, Orenstein, in at least the p. 1, ¶ 3, discloses a passenger re-accommodation system that minimizes costs, and Pucci, in at least p. 2, ¶ 10 discloses passenger re-booking costs can include meals and hotel rooms. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method and machine-readable storage of Slivka in view of Campbell to have included a rebooking cost of each passenger as disclosed by Orenstein and Pucci because the method "minimizes the provider cost of moving passengers to a different airline or an ancillary travel provider" (Slivka ¶ 0015).

Regarding the limitation:

- *wherein the processing is to be completed in a timely fashion to avoid additional costs including meal and hotel accommodation cost.*

Orenstein and Pucci, disclose the desire to minimize costs and the associated costs of a delay if a passenger is not rebooked and has to wait. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to process the rebooking quickly in order to successfully avoid these costs as well as decreasing waiting passenger's dissatisfaction from excessive wait times.

**EXAMINER'S NOTE:** The limitation "wherein the processing is to be completed in a timely fashion **to avoid additional costs including meal and hotel accommodation cost**" is merely a statement of intended use and is only afforded no patentable weight to the extent that it imparts limitations on the invention, which are met by the teachings of Slivka et al., Orenstein, and Pucci.

**Claim 7:**

Slivka/Cambell/Smith, as shown above, discloses the limitations of claim 1. In addition, Slivka also discloses the following limitation(s):

- *wherein said passenger data comprises re-accommodation data (see at least Slivka ¶ 0035, "profile status of the passenger"; ¶ 0036, "...re-accommodation driver 111 may retrieve from*

operations database 118 seat availability information associated with each flight included in the flight schedule information.”).

**Claim 8:**

Slivka/Cambell/Smith, as shown above, discloses the limitations of claim 1 and 13. In addition, Slivka also discloses the following limitation(s):

- *wherein the processing step comprises scoring passengers based on the set of rules, and displaying the score of each passenger* (Slivka: paragraphs 0026, “...the present invention may also employ rules that rank certain types of passengers.”; 0028, “monitor 115”).

***Conclusion***

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Kevin H. Flynn** whose telephone number is **571.270.3108**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **John W. Hayes** can be reached at **571.272.6708**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

**Commissioner of Patents**

**P.O. Box 1450**

**Alexandria, VA 22313**

or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

/Kevin H. Flynn/  
Examiner, Art Unit 3628  
6 October 2008

/JOHN W HAYES/  
Supervisory Patent Examiner, Art Unit 3628